IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) ~~Power~~ A power amplifier for amplifying an electric signal in an operational frequency range, said power amplifier comprising:

- switching means for generating a block wave signal by alternately switching the block wave signal to a first supply voltage or a second supply voltage~~,~~;

- filter means for generating a power output signal by ~~low~~ low-pass filtering the block wave signal~~,~~;

- input means for receiving the electric signal and driving the switching means~~,~~; and

- a control circuit coupled to the output power signal and the input means for controlling the power amplifier,

characterized in that the control circuit is connected between the power output signal and a linear input of the input means for controlling both the gain in the operational frequency range and ~~also~~ said alternately switching of the switching means, and said linear input ~~being~~ is substantially free of hysteresis.

2. (Currently Amended) ~~Power~~ The power amplifier as claimed in claim 1, wherein the control circuit only has a voltage feedback from the power output signal.

3. (Currently Amended) ~~Power~~ The power amplifier as claimed in claim 2, wherein the control circuit comprises a first element, in ~~particular~~ the form of a resistor, for controlling said gain and a second element, in ~~particular~~ the form of a capacitance in series with a resistor, for controlling said alternately switching.

4. (Currently Amended) ~~Power~~ The power amplifier as claimed in claim 1, wherein the filter means ~~comprise~~ comprises a self-inductance and a capacitance.

5. (Currently Amended) ~~Power~~ The power amplifier as claimed in claim 1, wherein the switching means ~~comprise~~ comprises a first switching unit for switching to the first supply voltage and a second switching unit for switching to the second supply voltage, and the input means ~~comprise~~ comprises a voltage comparator having complementary current outputs for respectively driving the first and second switching ~~unit~~units.

6. (Currently Amended) ~~Power~~ The power amplifier as claimed in claim 5, wherein the voltage comparator comprises a difference amplifier and a switching current mirror providing said complementary current outputs.

7. (Currently Amended) ~~Power~~ The power amplifier as claimed in claim 1, wherein the switching means ~~comprise~~ comprises a first switching unit for switching to the first supply voltage and a second switching unit for switching to the second supply voltage, both said first and second switching units being substantially identical.

8. (Currently Amended) ~~Power~~ The power amplifier as claimed in claim 7, wherein one of the switching units is floating with respect to said first and second supply voltages, and derives ~~its~~ power from a bootstrap diode power circuit.

9. (Currently Amended) ~~Power~~ The power amplifier as claimed in claim 1, wherein the switching means ~~comprise~~ comprises a driver circuit for a MOSFET type power switch, the circuit including an active pull-up circuit for discharging a gate of said power switch.

10. (Currently Amended) ~~Power~~ A power amplifier circuit, for use in ~~a~~ the power amplifier as claimed in claim 1, for amplifying an electric signal in an operational frequency range, the power amplifier circuit comprising:

- switching means for generating a block wave signal by alternately switching the electric signal to a first supply voltage or a second supply voltage~~,~~; and

- input means for receiving the electric signal and driving the switching means,

characterized in that the input means ~~have~~ has a linear input for connecting a controlling circuit for controlling both the gain in the operational frequency range and also said alternately switching of the switching means, said controlling circuit being connected between the linear input and a power output signal generated by ~~low~~ low-pass filtering the block wave signal, said linear input being substantially free of hysteresis.